UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

Also to be sent to:
- Eureka Investment Co.
- Southern Pacific Transportation Company
- Houston Belt and Terminal Railway Co.
- Consolidated Leasing Ampelon[?] Terminals, Inc. (formerly Sea[?]...)
- Mustang Tractor and Equipment Company

CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Mr. James R. Anderson
Manager, Environmental Affairs
Olin Chemical Group
P.O. Box 2869
Lake Charles, Louisiana 70602

RE: Former Olin Plant at Wallisville Road, Houston, Texas

Dear Mr. Anderson:

After consideration of your Draft Remedial Action Plan of December 1981 and a report by Ecology and Environment (copy attached) regarding a visit to your former Wallisville Road site in January 1982, and after a brief EPA/TDWR tour of the site in March 1982, my staff has assembled the following proposals regarding additional investigation and remedial action needs. One issue involved in many of the following proposals is that of sampling. We believe that the additional sampling outlined below should be conducted by Olin and the other involved parties. I am submitting these proposals to you for your review and comment with the hope that we can work together to resolve the environmental problems at this site.

1. North-South ditch at eastern edge of site

Your proposal for soil removal and replacement is largely acceptable, subject to a few modifications as listed below:

a. You indicated that a strip twelve feet wide and averaging 2.5 feet in depth extending from the northeast corner to 600 feet south would be removed and replaced with clean compacted clay. EPA samples from depths of up to 24 inches indicated severe contamination (up to 41,500 ppm of total pesticides; see Attachment II) in the northern section of this area. It thus appears likely that substantial contamination could be left behind if only 30 inches of depth were removed from this area. We therefore believe that in addition to the proposed removal of 30 inches of depth in this northernmost section, materials should also be removed to such a depth that no noticeable evidence of pesticide contamination remains. Considering the data from the samples already

acquired, it appears that this area should extend to no more than 100 or 200 feet to the south of the northeast corner.

b. One EPA sample of surface soils acquired in the same ditch at 100 feet north of the northeast corner showed a total pesticide level of 73 ppm. A sample at this same location but at a 12 inch depth showed total pesticides of less than 1.0 ppm. These samples suggest that surface drainage may have contaminated this ditch to at least 100 feet northeast corner of the site. We therefore will require additional surface samples from the ditch at 200 feet, 300 feet, and 400 feet to the north of the northeast corner of the site, in order to determine the extent of this contamination. In addition, we feel that certain sediments in this section of the ditch should be removed and replaced with clean clay. Based on the data currently available, it appears that removal and replacement of sediments will be needed from the northeast corner of the site to a point at least 150 feet to the north of the northeast corner. The width of this removed strip should be no less than twelve feet. Depth of sediment removal should be no less than six inches at any point; and at the end of this section nearest the former plant side, sediment removal should be deep enough to remove those soils noticeably contaminated with pesticides. Should the additional sampling detailed above indicate contaminated sediments to the north of this area, then additional sediments will have to be removed and replaced with clean clay. A decision regarding the extent of this removal will be made once we receive the results of the additional sampling.

2. East-West ditch at north end of site

Your proposal to remove and replace soils from this area is generally acceptable, but we are currently without data confirming that contamination extends no further than the area you propose to address (a strip 1.5 feet deep, 8 feet wide, and from the northeast corner of the site to a point 400 feet to the west of the northeast corner). We therefore will require that four more surface samples be taken from this area (See Attachment III). Should these samples show acceptably low levels of contamination, then it is likely that clean-up in this area, beyond what you have already proposed, will not be required. Should additional clean-up be appropriate, the extent of that clean-up will be determined once the aforementioned samples have been analyzed.

3. Northwest quadrant of site (Sea-Train Property)

One EPA sample showed a pesticide concentration of 37 ppm in surface materials from this area. Samples from depths of 24 inches and 48 inches from the same location showed little contamination (less than 1.0 ppm). It appears that the surface in this area is somewhat contaminated, while the subsurface may not be. In order to better ascertain the extent and degree of contamination in this area, we believe that additional samples should be acquired from

this area (six evenly spaced six-inch cores). The decision for or against remedial action with respect to this part of the site will be substantially based on the results of these additional samples.

4. Southwest quadrant of site (Mustang property)

This area is covered by either buildings or asphalt, except for one segment (roughly 200' by 200') at the northeast corner. This open area has been sampled at the surface, at 24 inches, and at 48 inches, and these samples all showed pesticide concentrations of less than 1.0 ppm. Because of the extent of cover already existing on this property and because of the low levels of pesticide contamination found, unless subsurface monitoring should demonstrate previously unencountered contamination, clean-up action is not likely to be required on this part of the site.

5. Central drainage ditch

It is our understanding during the site visit of January 13, 1982, that there was a concensus that sampling was needed in the central ditch. We agree with that concensus. We will therefore require five surface samples from the ditch (to depths of six inches), and that these samples be taken at 50 feet, 150 feet, 250 feet, 450 feet, and 800 feet to the south of the north fence. We will postpone any decisions on remedial needs in this ditch until the results of these samples are available.

6. Subsurface contamination and potential migration of that contamination

Aerial photography indicates that wastes have been deposited in pits and ponds beneath the current Sea-Train section of this site. Olin has also indicated the existence of ponds in this general vicinity in their Draft Remedial Action Plan. Aerial photos showed an additional dump on the east-central portion of the current Southern Pacific property. Further, Olin has indicated that some solvents may have been placed in at least some of these pits along with the pesticides. The presence of pesticide wastes, the possibility that they could be mobilized by solvents, and the possible existence of subsurface sand stringers leads us to believe that a subsurface hazard is a clear possibility.

Although it has been Olin's contention that the relative impermeability of the soils on the site and the insolubility of contaminants would prevent the migration of these contaminants, the EPA feels that subsurface migration is a reasonable possibility. Accordingly, EPA will require subsurface monitoring. We therefore will require that soil cores be taken from the two areas where disposal pits or dumps have been located (the Sea-Train lot and the east-central portion of the Southern Pacific property). It is our position that cores should be obtained as shown in Attachment IV. Soil types in these cores should be identified, and at least some of those cores should be analyzed for pesticides. After the cores are drilled, permeability head drop tests should be conducted. The results of these tests should indicate whether migration of contamination has occurred, or if further groundwater monitoring is warranted.

We wish to inform you that we intend to formalize the investigative/remedial program. This could be accomplished through an Administrative Order on Consent, issued by the Assistant Administrator for Solid Waste and Emergency Response under the authority of Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §9606, or a consent decree pursuant to a civil action under Section 106 of CERCLA. Such an order, or decree, would address investigation and the implementation of remedial work. In addition, it may contain provisions for the control of future uses of the site, and if appropriate, for further monitoring.

If you and the other parties involved in this matter decline to participate in this investigative and remedial program based on an administrative order on consent, or a consent decree, then an administrative order may be issued on a unilateral basis by the Assistant Administrator or the matter may be pursued in Federal Court. Further, EPA may seek to implement said program under Section 104 of CERCLA, 42 U.S.C. §9604, using the Superfund, and pursue reimbursement for costs incurred from responsible parties at a later date under Section 107 of CERCLA, 42 U.S.C. §9607.

In order to discuss the aforementioned issues, it would be desirable for you and the other involved parties to come to Dallas for a meeting. If you will contact David Price (214) 767-9701, he will schedule that meeting. We are looking forward to hearing from you, and we trust that we can work together to resolve the matters regarding the former Olin site on Wallisville Road in an environmentally beneficial manner.

Sincerely,

William B. Hathaway
Deputy Director
Air & Waste Management Division

Enclosures

cc: Gary D. Schroeder, Texas Department
of Water Resources

ATTACHMENT I

DRAFT

REMEDIAL ACTION PLAN

WALLISVILLE ROAD SITE

HOUSTON, TEXAS

PURPOSE:

The purpose of this plan is to respond to the Environmental Protection Agency's request for a series of remedial measures that will eliminate any potential threat to public health and the environment that may be posed by the migration of residual contaminants from a former pesticide formulation facility.

REMEDIAL ACTION: (See Exhibit A)

The major portion of the property is covered by layers of asphalt, concrete or shell which effectively seal-off any contact betwen rainfall and runoff and residual contaminants in the soil. The character of the surface and immediate subsurface soils and the solubility of the contaminants are such that significant migration of contaminants with groundwater will not occur. The contaminants are not volatile and the same surfaces that prevent surface water contact prevent migration via the air.

This remedial plan provides for the removal of contaminated surface soils from the drainage courses to the north and east of the site and replacement with clean clays. It also provides for capping that portion of the site proper where the original soils are not covered. These measures assure that the site poses no threat to public health or the environment.

It is proposed to remove the contaminated surface soil from the drainways to the north and east of the site and replace it with clean clay. The drainway down the center of the site that is not now covered with concrete, asphalt or shell will be asphalted. The contaminated soil will be disposed of in a secure landfill in accordance with EPA and State regulations.

Specifically, the following actions are proposed:

1. Remove soil from the Houston Belt & Terminal Railway (hereinafter referred to as "Houston Belt") right-of-way consisting of a strip 12 feet wide and averaging 2.5 feet in depth extending from the northeast corner of the property 600 feet south and replace with clean compacted clay. The amount to be removed is approximately 670 cubic yards.
2. Remove soil from the remaining distance of about 500 feet south along the Houston Belt right-of-way consisting of a strip 12 feet wide and averaging 1.5 foot in depth and replace with clean compacted clay. Amount to be removed is approximately 335 cubic yards.
3. Remove soil from the drainway running east and west at the north boundary of the property for a distance of 400 feet west of the northeast corner of the property. The Houston Power and Light Company has an easement in this area. The soil removed will be a 400 foot strip 1.5 foot deep (average) and 8 feet wide which will be replaced with compacted clean clay. The amount to be removed is approximately 175 cubic yards.

4. Emplace 2" asphalt topping on the unpaved 1,000 foot strip from north end of property on the western boundary of the Southern Pacific Railroad Company (hereinafter referred to as "Southern Pacific") property to the south end of the site. The strip average 15' in width. This would be approximately 1,600 sq. yards of surfacing.

In summary, it is proposed to remove approximately 1,200 cubic yards of soil extending well beyond the critical areas identified in the EPA survey and replace it with clean compacted clays. All removed soil will be disposed of in a secure and an approved landfill. The central drainway will be paved to prevent soil transport by erosion. These actions will remove the potential for and risk to public health or the environment from the residual contaminants at the site. The total cost of this plan is estimated to be $132,450.00. The specific costs are as follows:

1180 yards @ 60.00 per yd. remove, dispose & replace	$ 70,800.
1,667 sq. yds. @ $10.50 2" asphalt surface	17,500.
	$ 88,300.
Contingency, engineering 50%	$ 44,150.
	$132,450.

ENVIRONMENTAL RISK FACTORS:

The principal surface soil type at the Wallisville Road site is the Beaumont clay formation which is overlain locally by clays of low permeability. The significant groundwater sources of the area are in aquifers below the Beaumont clay formation. The low solubility of the contaminants, the low permeability of the surface soils and the impervious

nature of the Beaumont clay formation overlying the usable aquifers preclude any threat to public health or the environment through the migration of the residual contaminants from the site via groundwater movement.

The contaminants are non-volatile and with all contaminated residues covered by uncontaminated material in the form of hard surface or fill, the potential for contaminant migration via the air route is practically non-existent.

This plan calls for the removal or sealing (covering) of contaminanted soil so that it is no longer exposed to surface waters (rainfall runoff). These measures will also preclude inadvertent ingestion of contaminated soil at the site.

BACKGROUND AND SITE DESCRIPTION:

From 1950* to 1972 Olin operated a facility at 7621 Wallisville Road, Houston, at which among other operations various pesticides were formulated, packaged and shipped. When this facility was shutdown in 1972, the property consisting of about 18 acres was sold to Eureka Investment Company of El Campo (hereinafter referred to as "Eureka"). As part of the termination of Olin's operations, the Company cleaned up the plant area. Waste materials were disposed of both off-site and on site. (See Exhibit D).

Thereafter, the buildings were razed, the area graded and the property subdivided. Currently the southwest portion of the property consisting of about 5 acres is occupied by Mustang Tractor and Equipment Company (hereinafter referred to as "Mustang"). About 3.5 acres to the north of Mustang is being

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*In 1950 Olin bought what was then a sulfur plant from Southern Acid and Sulfur Company. Olin started dry formulation of pesticides in 1950 and liquid pesticides in 1955. Exhibit B attached, lists the pesticides handled at this site by Olin. (See also Exhibit C).

leased by Mustang to Seatrain Pacific Services, Inc., (hereinafter referred to as "Seatrain"). The eastern portion of the property consisting of about 9 acres is owned by Southern Pacific which uses it as a parking lot for truck trailers. Exhibit E shows the relative location of the present occupants on the original 18 acres.

Olin submitted information relative to the on-site waste disposal in response to the Eckhardt survey and the Superfund reporting requirements. The EPA made an inspection of this site in December, 1980 as a follow-up of these submissions, and found evidence of pesticides on the Houston Belt right-of-way. Houston Belt hired Rollins Environmental Services, Inc., (hereinafter referred to as "Rollins") as a contractor who removed and disposed of several piles of contaminated material. In February, 1981, EPA conducted a more extensive sampling and analysis. EPA, Region VI, then submitted requests to Olin, Southern Pacific and Houston Belt for submission of "a comprehensive plan for clean up" of the site.

EPA SURVEYS:

Personnel from EPA, Region VI, conducted a preliminary survey in December, 1980 of the Houston Belt right-of-way. This revealed three or four small piles of material about 18 inches high and 3 to 4 feet in diameter containing toxaphene. They were located at the north end of the right-of-way just outside the east boundary of the property. EPA classified the apparent seriousness of the problem in their Site Inspection Report, dated December 19, 1980, as low.

During January, Rollins under contract to Houston Belt removed these piles of materials plus surface soil in the vicinity. The total amount of material removed was contained in seven 55 gallon drums.

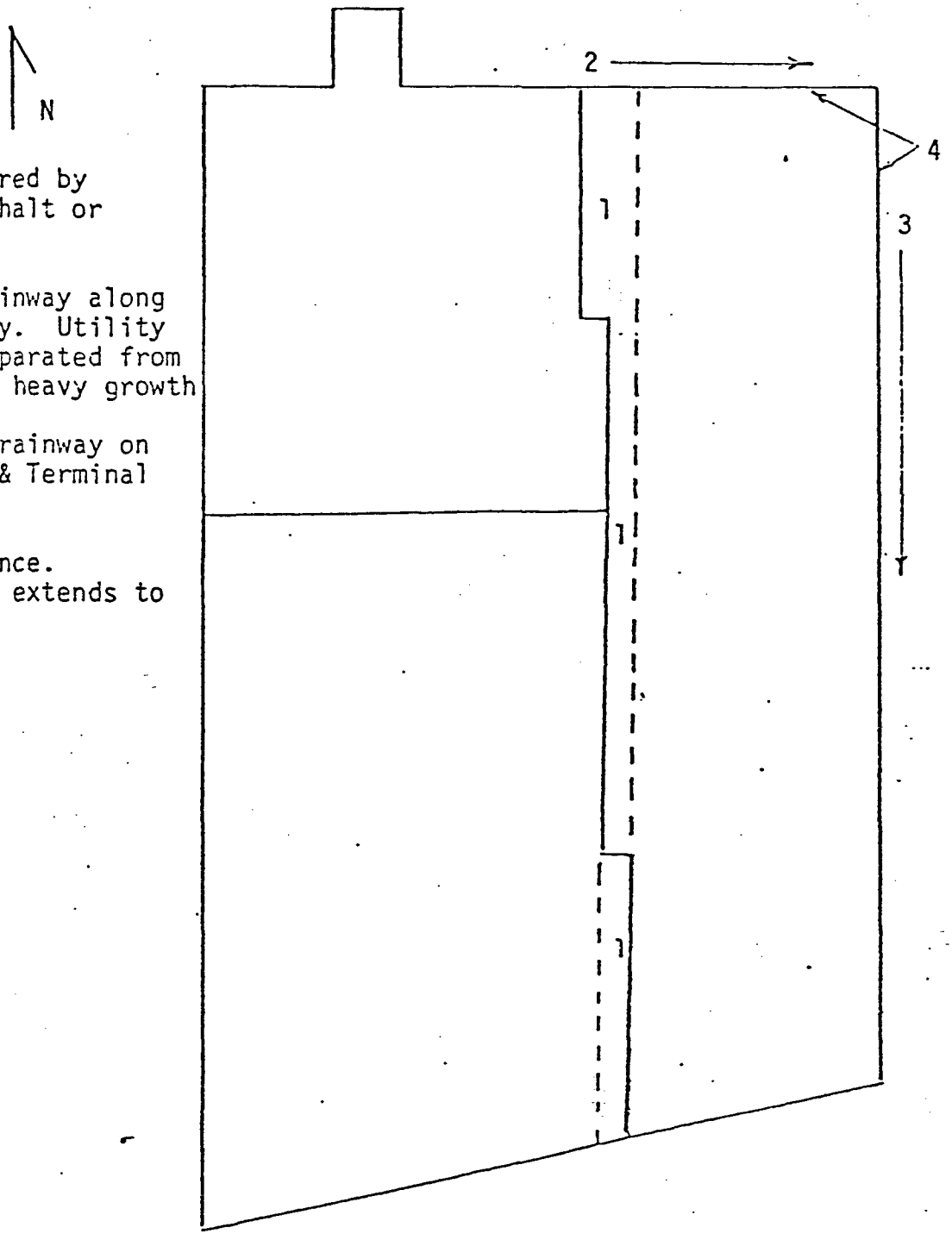
During February, 1981, EPA, Region VI, conducted a subsequent sampling and analysis. In addition to Houston Belt right-of-way, EPA also sampled on property occupied by Southern Pacific, Mustang and Seatrain and also at several adjacent off-site locations.

Three pesticides were detected in a number of these areas. These were, in decreasing order of concentrations generally found, toxaphene, DDT and PCNB. Pesticide contamination also was found in the drainways bordering the north and east boundaries of the property. Sample points together with analytical results obtained by the EPA are shown in Exhibit F.

EXHIBIT A

REMEDIAL ACTION AREAS

WALLISVILLE ROAD SITE



1. Area not covered by concrete, asphalt or shell.

2. East-West drainway along North boundary. Utility right away separated from back yards by heavy growth

3. North-South drainway on Houston Belt & Terminal right-of-way.

4. Chain link fence. Asphalt cover extends to fence.

EXHIBIT B

LIST OF PESTICIDES FORMULATED BY OLIN AT WALLISVILLE ROAD SITE

BHC

Dieldrin

Aldrin

DDT

DDD

Chlordane

Heptachlor

Toxaphene

Malathion

Parathion

methyl Parathion

Sevin

Endrin

Epichlorohydrin

Terraclor

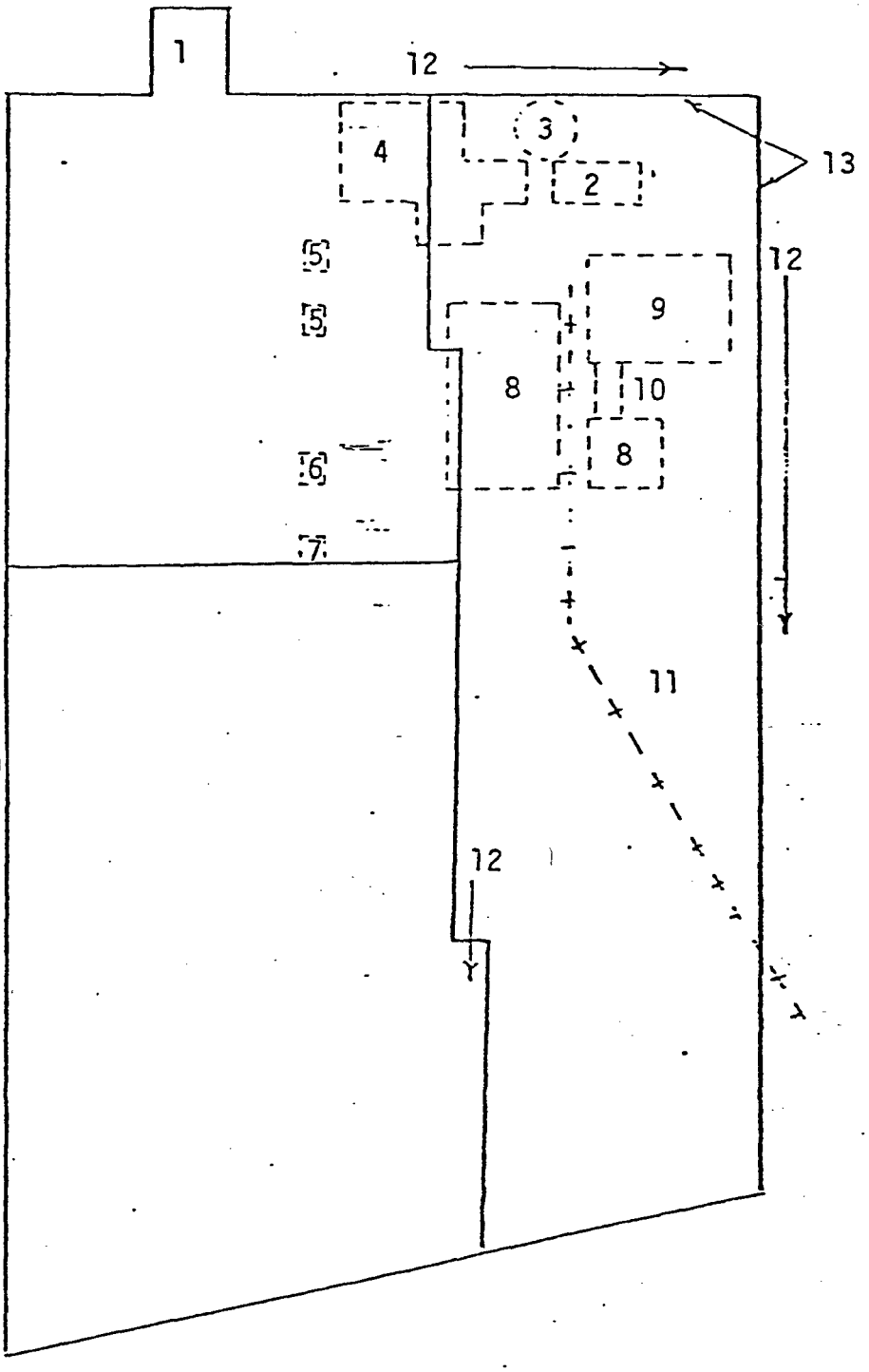
Terrazol

Methoxychlor

EXHIBIT C

OLIN OPERATIONS

WALLISVILLE ROAD SITE



1. Former Olin lot - now Seatrain entrance.
2. Sulfur storage
3. Toxaphene tank
4. Dry products formulation
5. Change houses
6. Pump house & fire pond
7. Office
8. Storage
9. Liquid products formulation
0. Ramp
1. Railroad spur
2. Drainage
3. Chain-link fence

EXHIBIT D

DISPOSAL PITS

WALLISVILLE ROAD SITE

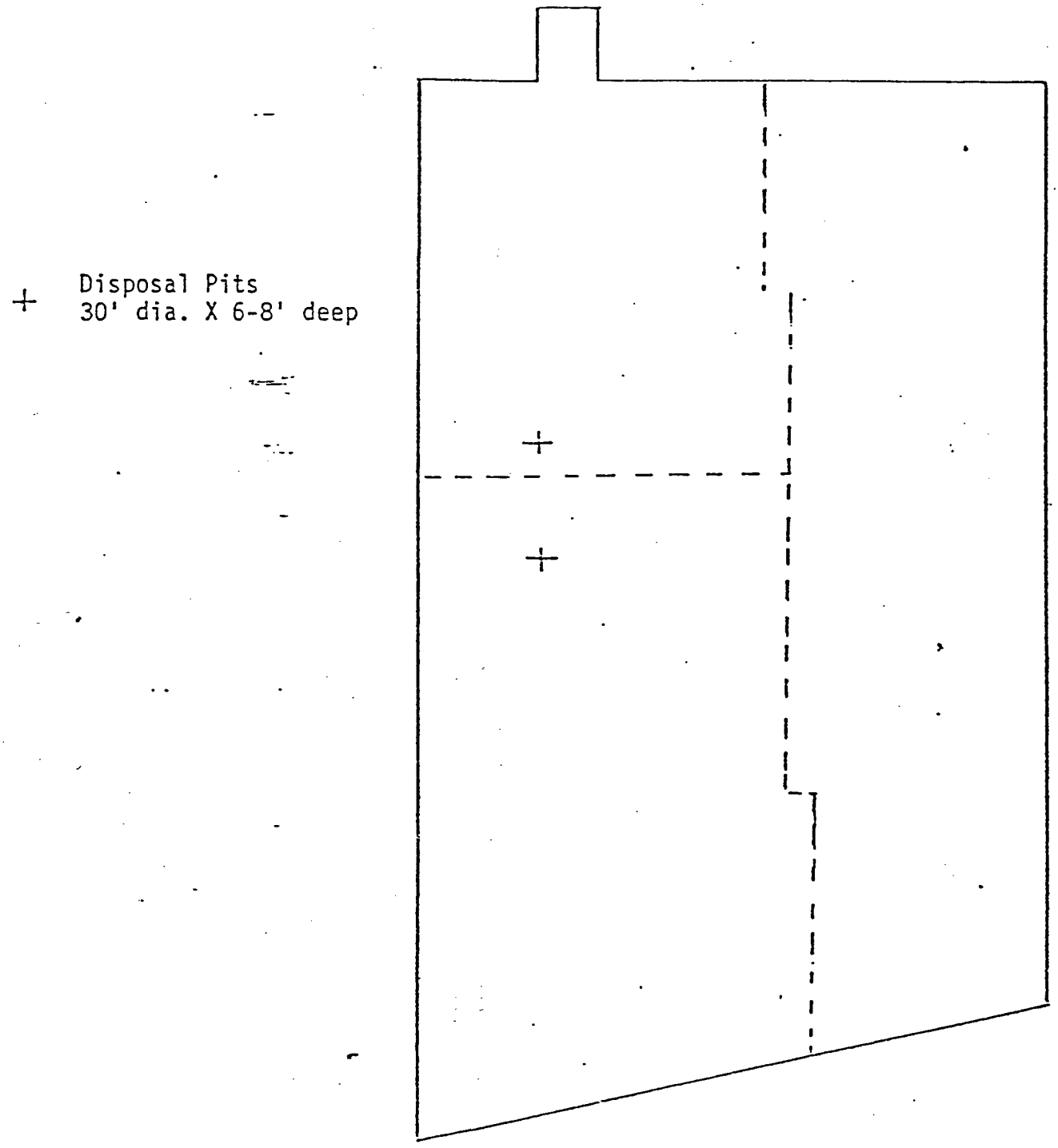


EXHIBIT E

PRESENT OCCUPANTS

WALLISVILLE ROAD SITE

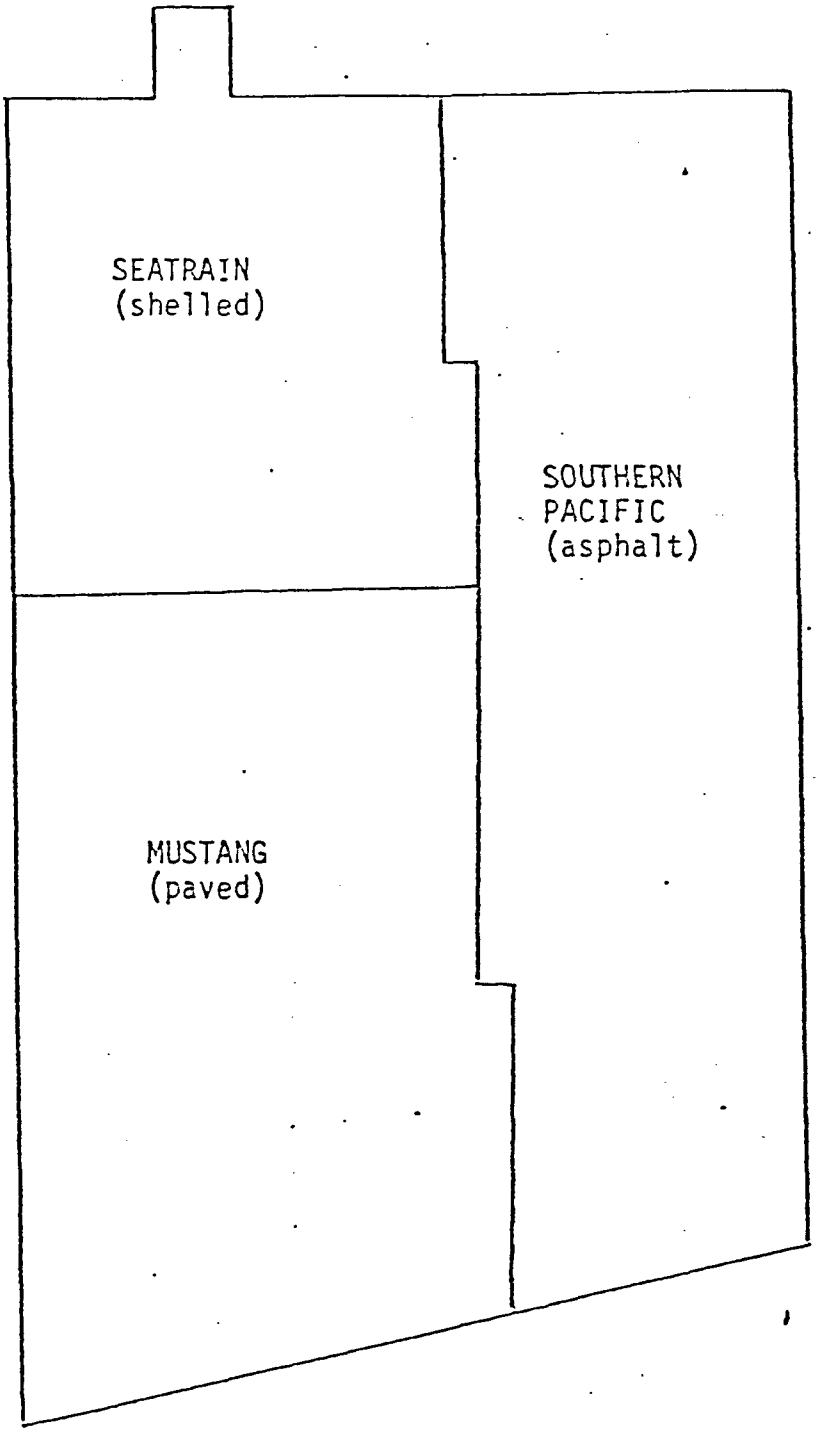
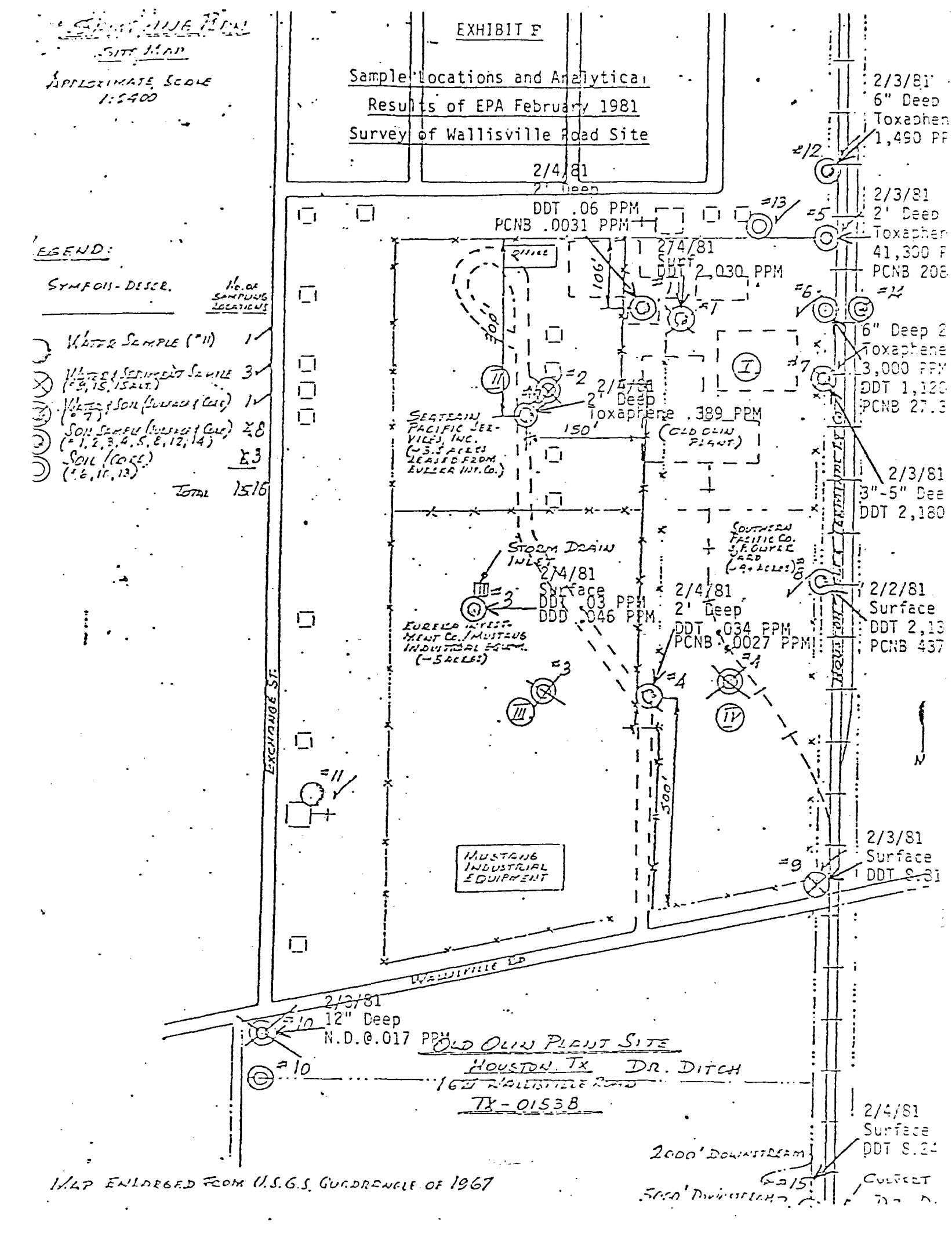
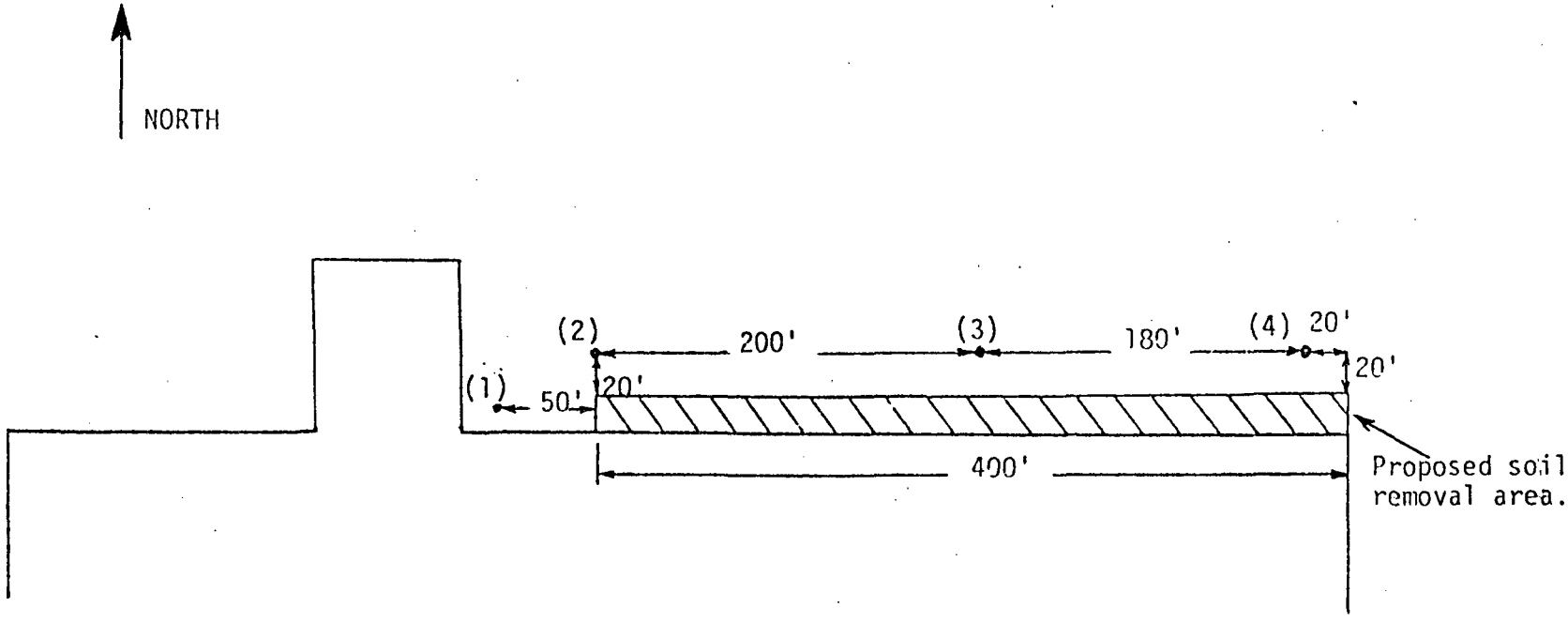


EXHIBIT F

Sample Locations and Analytical Results of EPA February 1981 Survey of Wallisville Road Site

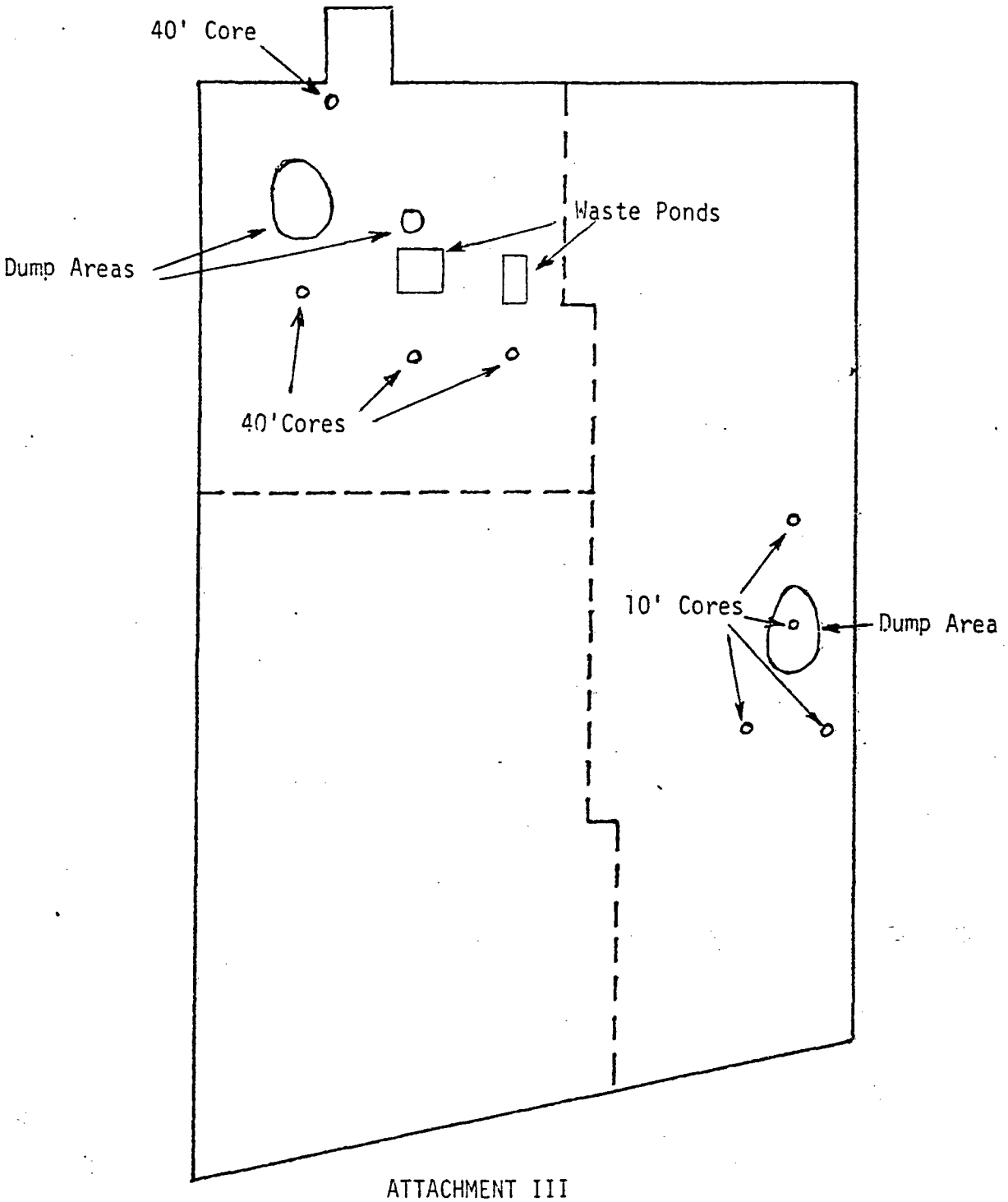


MAP ENLARGED FROM U.S.G.S. QUADRANGLE OF 1967



ATTACHMENT II

Locations of Four Additional Sampling Points
Along The Northeast Edge of The
S.P. Oliver Yard



ATTACHMENT III
SUBSURFACE CORING PLAN